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NEWS	1		Web Page URLs for STN Seminar Schedule - N. America
NEWS	2	Apr 08	"Ask CAS" for self-help around the clock
NEWS	3	Apr 09	BEILSTEIN: Reload and Implementation of a New Subject Area
NEWS	4	Apr 09	ZDB will be removed from STN
NEWS	5	Apr 19	US Patent Applications available in IFICDB, IFIPAT, and IFIUDB
NEWS	6	Apr 22	Records from IP.com available in CAPLUS, HCAPLUS, and ZCAPLUS
NEWS	7	Apr 22	BIOSIS Gene Names now available in TOXCENTER
NEWS	8	Apr 22	Federal Research in Progress (FEDRIP) now available
NEWS	9	Jun 03	New e-mail delivery for search results now available
NEWS	10	Jun 10	MEDLINE Reload
NEWS	11	Jun 10	PCTFULL has been reloaded
NEWS	12	Jul 02	FOREGE no longer contains STANDARDS file segment
NEWS	13	Jul 22	USAN to be reloaded July 28, 2002; saved answer sets no longer valid
NEWS	14	Jul 29	Enhanced polymer searching in REGISTRY
NEWS	15	Jul 30	NETFIRST to be removed from STN
NEWS	16	Aug 08	CANCERLIT reload
NEWS	17	Aug 08	PHARMAMarketLetter(PHARMAML) - new on STN
NEWS	18	Aug 08	NTIS has been reloaded and enhanced
NEWS	19	Aug 19	Aquatic Toxicity Information Retrieval (AQUIRE) now available on STN
NEWS	20	Aug 19	IFIPAT, IFICDB, and IFIUDB have been reloaded
NEWS	21	Aug 19	The MEDLINE file segment of TOXCENTER has been reloaded
NEWS	22	Aug 26	Sequence searching in REGISTRY enhanced
NEWS	23	Sep 03	JAPIO has been reloaded and enhanced
NEWS	24	Sep 16	Experimental properties added to the REGISTRY file
NEWS	25	Sep 16	Indexing added to some pre-1967 records in CA/CAPLUS
NEWS	26	Sep 16	CA Section Thesaurus available in CAPLUS and CA
NEWS	27	Oct 01	CASREACT Enriched with Reactions from 1907 to 1985
NEWS	28	Oct 21	EVENTLINE has been reloaded
NEWS	29	Oct 24	BEILSTEIN adds new search fields
NEWS	30	Oct 24	Nutraceuticals International (NUTRACEUT) now available on STN
NEWS	31	Oct 25	MEDLINE SDI run of October 8, 2002
NEWS EXPRESS			October 14 CURRENT WINDOWS VERSION IS V6.01, CURRENT MACINTOSH VERSION IS V6.0a(ENG) AND V6.0Ja(JP), AND CURRENT DISCOVER FILE IS DATED 01 OCTOBER 2002
NEWS HOURS			STN Operating Hours Plus Help Desk Availability
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FILE 'HOME' ENTERED AT 08:47:32 ON 15 NOV 2002

=> file agricola caplus biosis

COST IN U.S. DOLLARS

SINCE FILE

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ENTRY

SESSION

FULL ESTIMATED COST

0.21

0.21

FILE 'AGRICOLA' ENTERED AT 08:47:53 ON 15 NOV 2002

FILE 'CAPLUS' ENTERED AT 08:47:53 ON 15 NOV 2002

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FILE 'BIOSIS' ENTERED AT 08:47:53 ON 15 NOV 2002

COPYRIGHT (C) 2002 BIOLOGICAL ABSTRACTS INC. (R)

=> s plant? and (flowering locus t or ft)

L1 6284 PLANT? AND (FLOWERING LOCUS T OR FT)

=> s l1 and flower?

L2 184 L1 AND FLOWER?

=> s l2 and (anti-sense or antisense)

L3 3 L2 AND (ANTI-SENSE OR ANTISENSE)

=> dup rem l3

PROCESSING COMPLETED FOR L3

L4 3 DUP REM L3 (0 DUPLICATES REMOVED)

=> d 1-3 ti

L4 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2002 ACS

TI Arabidopsis gene **FT (flowering locus T)** and transgenic **plants** having modulated **flower** development

L4 ANSWER 2 OF 3 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

TI **Flowering locus T (FT)** and genetically modified **plants** having modulated **flower** development.

L4 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2002 ACS

TI **Flowering locus t (ft)** and genetically modified **plants** having modulated **flower** development with applications for crop **plants**

=> d pi

L4 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2002 ACS

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
------------	------	------	-----------------	------

-----	-----	-----	-----	-----
PI US 2001049831	A1	20011206	US 1999-291809	19990414
US 6225530	B1	20010501	US 1998-60726	19980415
WO 9953070	A1	19991021	WO 1999-US8151	19990413

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ,  
 DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS,  
 JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK,  
 MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,  
 TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD,  
 RU, TJ, TM  
 RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,  
 ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,  
 CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

=> d so

L4 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2002 ACS  
 SO U.S. Pat. Appl. Publ., 20 pp., Cont.-in-part of Appl. No. PCT/US99/08151.  
 CODEN: USXXCO

=> d 2 so

L4 ANSWER 2 OF 3 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.  
 SO Official Gazette of the United States Patent and Trademark Office Patents,  
 (May 1, 2001) Vol. 1246, No. 1, pp. No Pagination. e-file.  
 ISSN: 0098-1133.

=> d 3 so

L4 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2002 ACS  
 SO PCT Int. Appl., 64 pp.  
 CODEN: PIXXD2

=> d 3 pi

L4	ANSWER 3 OF 3	CAPLUS	COPYRIGHT 2002 ACS		
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	WO 9953070	A1	19991021	WO 1999-US8151	19990413
	W:				
	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ,				
	DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS,				
	JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK,				
	MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,				
	TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD,				
	RU, TJ, TM				
	RW:				
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	ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,				
	CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	US 6225530	B1	20010501	US 1998-60726	19980415
	CA 2328461	AA	19991021	CA 1999-2328461	19990413
	AU 9935601	A1	19991101	AU 1999-35601	19990413
	EP 1073743	A1	20010207	EP 1999-917491	19990413
	R:				
	AT, BE, CH, DE, DK, ES, FR, GB, GR, LI, LU, NL, SE, MC, PT, IE, FI				
	BR 9910123	A	20011002	BR 1999-10123	19990413
	JP 2002511270	T2	20020416	JP 2000-543618	19990413
	US 2001049831	A1	20011206	US 1999-291809	19990414
	US 2002029395	A1	20020307	US 2001-845849	20010430

=> s flower and delay and (antisense or anti-sense)  
 L5 11 FLOWER AND DELAY AND (ANTISENSE OR ANTI-SENSE)

=> dup rem l5  
 PROCESSING COMPLETED FOR L5

L6 9 DUP REM L5 (2 DUPLICATES REMOVED)

=> d 1-9 ti

L6 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2002 ACS

TI BAG proteins of *Arabidopsis thaliana* and their use in delaying senescence and improving disease and stress resistance in transgenic plants

L6 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2002 ACS

TI Discovery of *Arabidopsis thaliana* embryonic **flower** 1 gene for use in delaying reproductive development of transgenic plants

L6 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2002 ACS

TI A cytokinin-metabolizing enzyme encoded by SPS gene of *Arabidopsis* and its use in controlling shoot branching in plants

L6 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2002 ACS

TI *Arabidopsis thaliana* gene FWA and uses for control of flowering in transgenic plants

L6 ANSWER 5 OF 9 AGRICOLA

DUPLICATE 1

TI Cytokinin and gibberellin activate SaMADS A, a gene apparently involved in regulation of the floral transition in *Sinapis alba*.

L6 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2002 ACS

TI Physiological analysis of **flower** and leaf abscission in **antisense**-ACC oxidase tomato plants

L6 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2002 ACS

TI Corn gene Id in regulation of floral induction in transgenic corn and sorghum

L6 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2002 ACS

TI Molecular biology of ethylene biosynthesis and its application in horticulture

L6 ANSWER 9 OF 9 CAPLUS COPYRIGHT 2002 ACS

TI **Antisense** ACC oxidase RNA delays carnation petal senescence

=> d 5 ab

L6 ANSWER 5 OF 9 AGRICOLA

DUPLICATE 1

AB In plants of *Sinapis alba* induced to **flower** by one long day, the MADS box gene, SaMADS A, is expressed initially in the central corpus (L3 cells) of the shoot apical meristem (SAM), about 1.5-2 days before initiation of the first floral meristem. We have combined a physiological approach by testing the effects of three putative floral signals on SaMADS A expression in the SAM of *S. alba* plants with a transgenic approach using *Arabidopsis thaliana* plants. A single application of a low dose of a cytokinin or a gibberellin to the apex of vegetative *S. alba* plants is capable of mimicking perfectly the initial effect of the long day on SaMADS A transcription. A treatment combining the two hormones caused the same activation but seems to enhance the level of SaMADS A expression. A sucrose application to the apex of vegetative plants is, on the contrary, unable to activate SaMADS A expression. None of these chemicals, alone or combined, is capable of causing the floral shift at the SAM. Since the constitutive expression of SaMADS A leads to precocious flowering in *A. thaliana* and **antisense** expression of a fragment of the *A. thaliana* homologue AGL20 leads to a **delay** in flowering time, these results are consistent with SaMADS A activation being an intermediate event in a cytokinin- and/or gibberellin-triggered signal transduction pathway that is involved in the regulation of floral transition in *S. alba*.

=> d 5 so

L6 ANSWER 5 OF 9 AGRICOLA DUPLICATE 1  
SO The Plant journal : for cell and molecular biology, Oct 2000. Vol. 24, No.  
1. p. 103-111  
Publisher: Oxford : Blackwell Sciences Ltd.  
ISSN: 0960-7412

=> d 4 so

L6 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2002 ACS  
SO PCT Int. Appl., 42 pp.  
CODEN: PIXXD2

=> d 4 pi

L6 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2002 ACS

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001002572	A1	20010111	WO 1999-NL414	19990702
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
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AU 9948037	A1	20010122	AU 1999-48037	19990702
WO 2001002573	A1	20010111	WO 2000-NL465	20000703
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RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1196582	A1	20020417	EP 2000-946522	20000703
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				

=> d 2 ab

L6 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2002 ACS  
AB The invention provides methods of modulating reproductive development in plants. More specifically, it provides the Arabidopsis thaliana EMF1 (embryonic flower 1) gene and encoded protein to inhibit or **delay** the transition to a reproductive state and instead promote vegetative growth. Another embodiment of the present invention is use of the EMF1 gene to promote uniform flowering in transgenic plants. Sequences of the EMF1 gene and protein are provided.

=> s leafy and plant?

L7 2914 LEAFY AND PLANT?

=> s 17 and flower?

L8 497 L7 AND FLOWER?

=> s l8 and transgenic

L9 89 L8 AND TRANSGENIC

=> s l9 and (antisense or anti-sense)

L10 1 L9 AND (ANTISENSE OR ANTI-SENSE)

=> d ti

L10 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2002 ACS

TI Floral homeotic gene PTLF, PTD, PTAG-1 and PTAG-2 promoters of *Populus balsamifera trichocarpa* for cytotoxin synthesis generating reproductive sterility in **transgenic plants**.

=> d ab

L10 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2002 ACS

AB Four floral homeotic genes from *Populus trichocarpa* are disclosed including PTLF (**leafy**), PTD (deficiens), PTAG-1 (agamous 1) and PTAG-2 (agamous 2). PTLF, PTD, PTAG-1 and PTAG-2 promoters may be used to drive cytotoxin synthesis in **plants**. The disclosed nucleic acid mols. are useful for producing **transgenic plants** having modified fertility characteristics, particularly sterility.

=> s constans and plant?

L11 97 CONSTANS AND PLANT?

=> s l11 and transgenic

L12 29 L11 AND TRANSGENIC

=> dup rem l12

PROCESSING COMPLETED FOR L12

L13 18 DUP REM L12 (11 DUPLICATES REMOVED)

=> s l13 and (antisense or anti-sense)

L14 5 L13 AND (ANTISENSE OR ANTI-SENSE)

=> d 1-5 ti

L14 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2002 ACS

TI Methods of gene silencing using poly-dT sequences in **plant**

L14 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2002 ACS

TI **Plant** gene promoters for the modification of gene expression

L14 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2002 ACS

TI Arabidopsis gene FT (flowering locus T) and **transgenic plants** having modulated flower development

L14 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2002 ACS

TI Rice photoperiod sensitivity gene Hd1 and use in controlling flowering time

L14 ANSWER 5 OF 5 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

TI Analysis of two **CONSTANS**-interacting proteins of Arabidopsis identified by yeast two-hybrid screen.

=> d 4 ab

L14 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2002 ACS

AB A rice photosensitivity gene Hd1, **antisense** RNA, ribozyme, recombinant expression, are disclosed. Use of the gene in modification of flowering time is claimed. Antibodies to the encoded protein is claimed. A major quant. trait locus (QTL) controlling response to photoperiod, Hd1, was identified by means of a map-based cloning strategy. High-resoln. mapping using 1505 segregants enabled us to define a genomic region of .apprx.12 kb as a candidate for Hd1. Further anal. revealed that the Hd1 QTL corresponds to a gene that is a homolog of **CONSTANS** in Arabidopsis. Sequencing anal. revealed a 43-bp deletion in the first exon of the photoperiod sensitivity 1 (sel) mutant HS66 and a 433-bp insertion in the intron in mutant HS110. Sel is allelic to the Hd1 QTL, as detd. by anal. of two sel mutants, HS66 and HS110. Genetic complementation anal. proved the function of the candidate gene. The amt. of Hd1 mRNA was not greatly affected by a change in length of the photoperiod. We suggest that Hd1 functions in the promotion of heading under short-day conditions and in inhibition under long-day conditions.

=> d 4 pi

L14	ANSWER 4 OF 5	CAPLUS	COPYRIGHT 2002 ACS		
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	WO 2001032881	A1	20010510	WO 2000-JP7693	20001101
	W: AU, CA, CN, JP, KR, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
	AU 2001010532	A5	20010514	AU 2001-10532	20001101
	EP 1229119	A1	20020807	EP 2000-971720	20001101
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR				

=> s floricaula and plant?

L15 94 FLORICAULA AND PLANT?

=> s l15 and transgenic

L16 19 L15 AND TRANSGENIC

=> dup rem l16

PROCESSING COMPLETED FOR L16

L17 9 DUP REM L16 (10 DUPLICATES REMOVED)

=> d 1-9 ti

L17 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 1

TI Apple has two orthologues of **FLORICAULA**/LEAFY involved in flowering

L17 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2002 ACS

TI Arabidopsis gene FT (flowering locus T) and **transgenic plants** having modulated flower development

L17 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 2

TI Characterization of a **FLORICAULA**/LEAFY homolog of Gnetum parvifolium and its implications for the evolution of reproductive organs in seed **plants**

L17 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2002 ACS

TI Eucalyptus development genes and sterile **plants** engineering

L17 ANSWER 5 OF 9 AGRICOLA

DUPLICATE 3

TI Diverse effects of overexpression of LEAFY and PTLF, a poplar (Populus) homolog of LEAFY/**FLORICAULA**, in **transgenic** poplar and

Arabidopsis.

L17 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 4  
TI Molecular control of early cone development in Pinus radiata

L17 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 5  
TI NEEDLY, a Pinus radiata ortholog of **FLORICAULA**/LEAFY genes,  
expressed in both reproductive and vegetative meristems

L17 ANSWER 8 OF 9 AGRICOLA DUPLICATE 6  
TI Down-regulation of RFL, the FLO/LFY homolog of rice, accompanied with  
panicle branch initiation.

L17 ANSWER 9 OF 9 AGRICOLA DUPLICATE 7  
TI Eucalyptus has a functional equivalent of the Arabidopsis floral meristem  
identity gene LEAFY.

=> d 9 ab

L17 ANSWER 9 OF 9 AGRICOLA DUPLICATE 7  
AB Two genes cloned from Eucalyptus globulus, Eucalyptus Leafy (ELF1 and  
ELF2), have sequence homology to the floral meristem identity genes LEAFY  
from Arabidopsis and **FLORICAULA** from Antirrhinum. ELF1 is  
expressed in the developing eucalypt floral organs in a pattern similar to  
LEAFY while ELF2 appears to be a pseudo gene. ELF1 is expressed strongly  
in the early floral primordium and then successively in the primordia of  
sepals, petals, stamens and carpels. This also expressed in the leaf  
primordia and young leaves and adult and juvenile trees. The ELF1 promoter  
coupled to a GUS reporter gene directs expression in **transgenic**  
Arabidopsis in a temporal and tissue-specific pattern similar to an  
equivalent Arabidopsis LEAFY promoter construct. Strong expression is seen  
in young flower buds and then later in sepals and petals. No expression  
was seen in rosette leaves or roots of flowering **plants** or in  
any non-flowering **plants** grown under long days. Furthermore,  
ectopic expression of the ELF1 gene in **transgenic** Arabidopsis  
causes the premature conversion of shoots into flowers, as does an  
equivalent 35S-LFY construct. These data suggest that ELF1 plays a similar  
role to LFY in flower development and that the basic mechanisms involved  
in flower initiation and development in Eucalyptus are similar to those in  
Arabidopsis.

=> s l17 and (antisense or anti-sense)  
L18 1 L17 AND (ANTISENSE OR ANTI-SENSE)

=> d ti

L18 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2002 ACS  
TI Arabidopsis gene FT (flowering locus T) and **transgenic**  
**plants** having modulated flower development

=> d 7 ab

1 ANSWERS ARE AVAILABLE. SPECIFIED ANSWER NUMBER EXCEEDS ANSWER SET SIZE  
The answer numbers requested are not in the answer set.  
ENTER ANSWER NUMBER OR RANGE (1):ti  
ANSWER NUMBERS NOT CORRECTLY SPECIFIED  
Enter an answer number, Example: 10  
several answer numbers, Example: 3,7,10  
a range of answer numbers, Example: 5-10  
or a combination of these. Example: 3,7,9-10,15  
ENTER ANSWER NUMBER OR RANGE (1):1



L18 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2002 ACS

AB The present invention provides a gene from *Arabidopsis thaliana*, termed "FT" for flowering locus T, located on chromosome 1 of *Arabidopsis*. FT protein is characterized as having a mol. wt. of approx. 20 kD, as detd. by SDS-PAGE, and functioning to modulate flowering time in **plants**. FT protein is homologous to CENTRORADIALIS (CEN) from snapdragon (*Antirrhinum majus*) and TERMINAL FLOWER 1 (TFL1) and E12A11 from *Arabidopsis thaliana*, and also to mammalian hippocampal cholinergic neuro-stimulating peptide precursor. FT is useful in methods of the invention for producing genetically modified **plants** characterized as having the phenotypic trait of modulated flower development, for example early or delayed flowering. Such **plants** can be genetically modified by nucleic acids encoding functional FT peptides; at least one **antisense** nucleic acid for FT; a structural gene that encodes wild-type FT polypeptide; or a structural gene that encodes dominant neg. polypeptides, for example, in order to modulate flowering in the **plant**.

=> d 117 7 ab

L17 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2002 ACS

DUPLICATE 5

AB The LEAFY/**FLORICAULA** genes from *Arabidopsis* and *Antirrhinum* are necessary for normal flower development and play a key role in diverse angiosperm species. A homolog of these flower meristem-identity genes, NEEDLY (NLY), has been identified in *Pinus radiata*. Although the NLY protein shares extensive sequence similarity with its angiosperm counterparts, it is lacking the proline-rich and acidic motifs thought to function as transcriptional activation domains. NLY already is expressed during vegetative development at least 5 yr before the transition to the reproductive phase. Expression of NLY in **transgenic** *Arabidopsis* promotes floral fate, demonstrating that, despite its sequence divergence, NLY encodes a functional ortholog of the **FLORICAULA**/LEAFY genes of angiosperms. Expression of the LFY::NLY transgene can largely complement the defects in flower development caused by a severe lfy allele.

=> s squamosa and plant?

L19 503 SQUAMOSA AND PLANT?

=> s 119 and transgenic

L20 18 L19 AND TRANSGENIC

=> dup rem 120

PROCESSING COMPLETED FOR L20

L21 10 DUP REM L20 (8 DUPLICATES REMOVED)

=> d 1-10 ti

L21 ANSWER 1 OF 10 CAPLUS COPYRIGHT 2002 ACS

DUPLICATE 1

TI Overexpression of MdMADS5, an APETALA1-like gene of apple, causes early flowering in **transgenic** *Arabidopsis*

L21 ANSWER 2 OF 10 AGRICOLA

TI Characterization of tobacco MADS-box genes involved in floral initiation.

L21 ANSWER 3 OF 10 CAPLUS COPYRIGHT 2002 ACS

TI *Arabidopsis* gene FT (flowering locus T) and **transgenic plants** having modulated flower development

L21 ANSWER 4 OF 10 AGRICOLA

DUPLICATE 2

TI The MADS-box gene DEFH28 from *Antirrhinum* is involved in the regulation of floral meristem identity and fruit development.

L21 ANSWER 5 OF 10 CAPLUS COPYRIGHT 2002 ACS  
 TI Production of **transgenic** impatiens resistant to viral,  
 bacterial, and fungal disease and insect pests

L21 ANSWER 6 OF 10 CAPLUS COPYRIGHT 2002 ACS  
 TI Eucalyptus development genes and sterile **plants** engineering

L21 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2002 ACS  
 TI Transformation of poinsettia and the development of insect-resistant  
 varieties

L21 ANSWER 8 OF 10 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 3  
 TI A petunia MADS box gene involved in the transition from vegetative to  
 reproductive development

L21 ANSWER 9 OF 10 AGRICOLA DUPLICATE 4  
 TI Characterization of MdMADS2, a member of the **SQUAMOSA** subfamily  
 of genes, in apple.

L21 ANSWER 10 OF 10 AGRICOLA DUPLICATE 5  
 TI Organ identity genes and modified patterns of flower development in  
 Gerbera hybrida (Asteraceae).

=> d 10 ab

L21 ANSWER 10 OF 10 AGRICOLA DUPLICATE 5  
 AB We have used Gerbera hybrida (the cultivated ornamental, gerbera) to  
 investigate the molecular basis of flower development in Asteraceae, a  
 family of flowering **plants** that have heteromorphic flowers and  
 specialized floral organs. Flowers of the same genotype may differ in a  
 number of parameters, including sex expression, symmetry, sympetaly and  
 pigmentation. In order to study the role of organ identity determination  
 in these phenomena we isolated and functionally analysed six MADS box  
 genes from gerbera; these were shown by phylogenetic analysis to be  
 orthologous to well characterized regulatory genes described from  
 Arabidopsis and Antirrhinum. Expression analysis suggests that the two  
 gerbera agamous orthologues, the globosa orthologue and one of the  
 deficiens orthologues may have functional equivalency to their  
 counterparts, participating in the C and B functions, respectively.  
 However, the function of a second deficiens orthologue appears unrelated  
 to the B function, and that of a **squamosa** orthologue seems  
 distinct from **squamosa** as well as from the A function. The  
 induction patterns of gerbera MADS box genes conform spatiotemporally to  
 the multi-flowered, head-like inflorescence typical of Asteraceae.  
 Furthermore, gerbera **plants transgenic** for the newly  
 isolated MADS box genes shed light onto the mechanistic basis for some  
 floral characteristics that are typical for Asteraceae. We can conclude,  
 therefore, that the pappus bristles are sepals highly modified for seed  
 dispersal, and that organ abortion in the female marginal flowers is  
 dependent upon organ identity and not organ position when position is  
 homeotically altered.

=> d 9 asb

'ASB' IS NOT A VALID FORMAT

In a multifile environment, a format can only be used if it is valid  
 in at least one of the files. Refer to file specific help messages  
 or the STNGUIDE file for information on formats available in  
 individual files.

REENTER DISPLAY FORMAT FOR ALL FILES (FILEDEFAULT):ab

L21 ANSWER 9 OF 10 AGRICOLA DUPLICATE 4

AB A MADS-box gene, MdMADS2, was isolated from the apple (*Malus x domestica* Borkh.) var Fuji and its developmental expression pattern was studied during flower development. MdMADS2 shares a high degree of amino acid sequence identity with the **SQUAMOSA** subfamily of genes. RNA blot analysis showed that MdMADS2 is transcribed through all stages of flower development, and its transcription was seen in the four floral organs. RNA in situ hybridization revealed that the MdMADS2 mRNA is expressed both in the inflorescence meristem and in the floral meristem. The MdMADS2 transcript was detected at all stages of flower development. Protein localization analysis showed that MdMADS2 protein was excluded from the stamen and carpel primordia, in which a considerable MdMADS2 mRNA signal was detected. This indicates that posttranscriptional regulation may be involved in the MdMADS2-mediated control of flower development. **Transgenic** tobacco expressing the MdMADS2 gene from the cauliflower mosaic virus 35S promoter showed early flowering and shorter bolts, but did not show any homeotic changes in the floral organs. These results suggest that MdMADS2 plays an important role during early stages of flower development.

=> d 19 80-89 ti

L9 ANSWER 80 OF 89 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

TI A common mechanism controls the life cycle and architecture of **plants**.

L9 ANSWER 81 OF 89 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

TI NEEDLY, a *Pinus radiata* ortholog of FLORICAULA/**LEAFY** genes, expressed in both reproductive and vegetative meristems.

L9 ANSWER 82 OF 89 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

TI Down-regulation of RFL, the FLO/LFY homolog of rice, accompanied with panicle branch initiation.

L9 ANSWER 83 OF 89 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

TI Studies of cytokinin action and metabolism using tobacco **plants** expressing either the ipt or the GUS gene controlled by a chalcone synthase promoter. I. Developmental features of the **transgenic plants**.

L9 ANSWER 84 OF 89 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

TI Determination of Arabidopsis floral meristem identity by AGAMOUS.

L9 ANSWER 85 OF 89 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

TI A **LEAFY** co-regulator encoded by UNUSUAL FLORAL ORGANS.

L9 ANSWER 86 OF 89 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

TI A gene triggering **flower** formation in Arabidopsis.

L9 ANSWER 87 OF 89 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

TI A developmental switch sufficient for **flower** initiation in diverse **plants**.

L9 ANSWER 88 OF 89 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

TI Genetic interactions that regulate inflorescence development in arabidopsis.

L9 ANSWER 89 OF 89 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

TI INCREASE OF ROOTING ABILITY IN THE WOODY SPECIES KIWIFRUIT ACTINIDIA-DELICIOSA A. CHEV. BY TRANSFORMATION WITH AGROBACTERIUM-RHIZOGENES ROL GENES.

=> d 19 87 ab

L9 ANSWER 87 OF 89 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.  
AB We have generated **transgenic plants** in which the **flower-meristem-identity** gene **LEAFY** of Arabidopsis is constitutively expressed. **LEAFY** is sufficient to determine floral fate in lateral shoot meristems of both Arabidopsis and the heterologous species aspen, with the consequence that **flower** development is induced precociously. Our results also suggest a new level of regulation during **flower** development, as indicated by the competence of the main shoot to respond to **LEAFY** activity.

=> d 117 8 ab

L17 ANSWER 8 OF 9 AGRICOLA DUPLICATE 6  
AB **FLORICAULA** (FLO) of Antirrhinum and **LEAFY** (FLY) of Arabidopsis regulate the formation of floral meristems. To examine whether same mechanisms control floral development in distantly related species such as grasses, we isolated RFL, FLO-LFY homolog of rice, and examined its expression and function. Northern analysis showed that RFL is expressed predominantly in very young panicle but not in mature florets, mature leaves, or roots. In situ hybridization revealed that RFL RNA was expressed in epidermal cells in young leaves at vegetative growth stage. After the transition to reproductive stage, RFL RNA was detected in all layers of very young panicle including the apical meristem, but absent in the incipient primary branches. As development of branches proceeds, RFL RNA accumulation localized in the developing branches except for the apical meristems of the branches and secondary branch primordia. Expression pattern of RFL raised a possibility that, unlike FLO and LFY, RFL might be involved in panicle branching. **Transgenic Arabidopsis plants** constitutively expressing RFL from the cauliflower mosaic virus 35S promoter were produced to test whether 35S-RFL would cause similar phenotype as observed in 35S-LFY **plants**. In 35S-RFL **plants**, transformation of inflorescence meristem to floral meristem was rarely observed. Instead, development of cotyledons, rosette leaves, petals, and stamens was severely affected, demonstrating that RFL function is distinct from that of LFY. Our results suggest that mechanisms controlling floral development in rice might be diverged from that of Arabidopsis and Antirrhinum.

=> flowering locus ca  
FLOWERING IS NOT A RECOGNIZED COMMAND  
The previous command name entered was not recognized by the system.  
For a list of commands available to you in the current file, enter "HELP COMMANDS" at an arrow prompt (=>).

=> s flowering locus ca  
L22 2 FLOWERING LOCUS CA

=> d 1-2 ti

L22 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2002 ACS  
TI Arabidopsis gene FT (flowering locus T) and transgenic plants having modulated flower development

L22 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2002 ACS  
TI Flowering locus t (ft) and genetically modified plants having modulated flower development with applications for crop plants

=> d pi

L22 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2002 ACS  
PATENT NO. KIND DATE APPLICATION NO. DATE

PI	US 2001049831	A1	20011206	US 1999-291809	19990414
	US 6225530	B1	20010501	US 1998-60726	19980415
	WO 9953070	A1	19991021	WO 1999-US8151	19990413

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RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

=> d 2 pi

L22	ANSWER 2 OF 2 CAPLUS COPYRIGHT 2002 ACS				
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9953070	A1	19991021	WO 1999-US8151	19990413

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RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

US 6225530	B1	20010501	US 1998-60726	19980415
CA 2328461	AA	19991021	CA 1999-2328461	19990413
AU 9935601	A1	19991101	AU 1999-35601	19990413
EP 1073743	A1	20010207	EP 1999-917491	19990413

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BR 9910123	A	20011002	BR 1999-10123	19990413
JP 2002511270	T2	20020416	JP 2000-543618	19990413
US 2001049831	A1	20011206	US 1999-291809	19990414
US 2002029395	A1	20020307	US 2001-845849	20010430

=> s fca and plant?

L23 150 FCA AND PLANT?

=> s l23 and (repro? or devel? or flower?)

L24 88 L23 AND (REPRO? OR DEVEL? OR FLOWER?)

=> dup rem l24

PROCESSING COMPLETED FOR L24

L25 52 DUP REM L24 (36 DUPLICATES REMOVED)

=> d 1-5 ti

L25 ANSWER 1 OF 52 CAPLUS COPYRIGHT 2002 ACS

TI Floral induction gene FPA isolated from Arabidopsis thaliana and use thereof

L25 ANSWER 2 OF 52 CAPLUS COPYRIGHT 2002 ACS

DUPLICATE 1

TI AtSWI3B, an Arabidopsis homolog of SWI3, a core subunit of yeast Swi/Snf chromatin remodeling complex, interacts with **FCA**, a regulator of **flowering** time

L25 ANSWER 3 OF 52 CAPLUS COPYRIGHT 2002 ACS

TI Genome analysis: RNA recognition motif (RRM) and K homology (KH) domain

RNA-binding proteins from the **flowering plant**  
Arabidopsis thaliana

L25 ANSWER 4 OF 52 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 2  
TI **Plant** genetic resources: Genetic structure of six Korean tea  
populations as revealed by RAPD-PCR markers

L25 ANSWER 5 OF 52 AGRICOLA DUPLICATE 3  
TI FLC, a repressor of **flowering**, is regulated by genes in  
different inductive pathways.

=> d 2 ab

L25 ANSWER 2 OF 52 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 1  
AB ATP-dependent nucleosome remodeling plays a central role in the regulation  
of access to chromatin DNA. Swi/Snf remodeling complexes characterized in  
yeast, Drosophila and mammals all contain a conserved set of core subunits  
composed of homologs of yeast SNF2-type DNA-dependent ATPase, SNF5 and  
SWI3 proteins. So far, no complete Swi/Snf-type complex has been  
characterized in **plants**. Arabidopsis contains a single  
SNF5-type gene, BSH, which has been shown to complement the yeast snf5  
mutation. Here we describe the characterization of AtSWI3B, the smallest  
of the four Arabidopsis homologs of SWI3. The gene encoding AtSWI3B is  
expressed ubiquitously in the **plant**. AtSWI3B is localized to  
nuclei and is assocd. mostly with the chromatin and sol. protein  
fractions. When expressed in Saccharomyces cerevisiae, the cDNA encoding  
AtSWI3B partially complements the swi3 mutant phenotype. However, like  
BSH, AtSWI3B is unable to activate transcription in yeast when tethered to  
DNA. The anal. by yeast two-hybrid indicates that AtSWI3B is capable of  
forming homodimers and interacts with BSH as well as with two other  
members of the Arabidopsis SWI3 family: AtSWI3A and AtSWI3C. The results  
of phage display screen using recombinant protein, confirmed by direct  
yeast two-hybrid analyses, indicate that AtSWI3B interacts with  
**FCA**, a regulator of **flowering** time in Arabidopsis. This  
interaction is through the C-terminal region of **FCA**, located  
outside the conserved RNA- and protein-binding domains of this protein.

=> s l25 and transgenic  
L26 4 L25 AND TRANSGENIC

=> d 1-4 ti

L26 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2002 ACS  
TI Floral induction gene FPA isolated from Arabidopsis thaliana and use  
thereof

L26 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2002 ACS  
TI Arabidopsis gene FT (**flowering** locus T) and **transgenic**  
**plants** having modulated **flower development**

L26 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2002 ACS  
TI The **FCA** genes of Arabidopsis and Brassica and their use in  
regulating the **flowering** of **plants**

L26 ANSWER 4 OF 4 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.  
TI Genetic control of **flowering**.

=> d 4 a

'A' IS NOT A VALID FORMAT

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in at least one of the files. Refer to file specific help messages

or the STNGUIDE file for information on formats available in individual files.

REENTER DISPLAY FORMAT FOR ALL FILES (FILEDEFAULT):ab

L26 ANSWER 4 OF 4 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

AB **FCA** genes of *Arabidopsis thaliana* and *Brassica napus* are provided, enabling **flowering** characteristics, particularly timing of **flowering**, to be influenced in **transgenic plants**. Timing of **flowering** may be delayed or hastened using sense and antisense expression, also various mutants and alleles, including alternatively spliced forms.

=> d 3 ab

L26 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2002 ACS

AB The **FCA** genes of *Arabidopsis thaliana* and *Brassica napus* are cloned for us in the control of **flowering** characteristics, particularly timing of **flowering**, in **transgenic plants**. Timing of **flowering** may be delayed or hastened using sense and antisense expression. Various alleles of the genes, including alternatively spliced forms are also described. The *Arabidopsis* gene was cloned by mapping and chromosome walking using polymorphisms between *Landsberg erecta* and *Columbia* varieties as landmarks. Cloning was confirmed by demonstrating complementation of an **fca** mutant by transformation with a wild-type gene. Sequencing of the gene did not show any significant similarity to other genes involved in control of **flowering**. The *Arabidopsis* clone was used as a probe to identify the *Brassica napus* gene. *Arabidopsis* homozygous for a T-DNA insertion in the **FAC** showed earlier **flowering** than heterozygotes and antisense expression constructs gave rise to a late **flowering** phenotype. Constitutive expression of the gene from a 35S promoter did not significantly affect **flowering** timing or behavior.

=> dd 4 so

DD IS NOT A RECOGNIZED COMMAND

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For a list of commands available to you in the current file, enter "HELP COMMANDS" at an arrow prompt (=>).

=> d 4 so

L26 ANSWER 4 OF 4 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

SO Official Gazette of the United States Patent and Trademark Office Patents, (Oct. 31, 2000) Vol. 1239, No. 5, pp. No Pagination. e-file. ISSN: 0098-1133.

=> d 3 pi

L26 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2002 ACS

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9638560	A2	19961205	WO 1996-GB1332	19960603
WO 9638560	A3	19970109		
W:	AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG			
RW:	KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA			
CA 2221092	AA	19961205	CA 1996-2221092	19960603
AU 9659060	A1	19961218	AU 1996-59060	19960603

AU 709423	B2	19990826		
EP 832234	A2	19980401	EP 1996-916237	19960603
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, PT, IE, FI				
JP 11506001	T2	19990602	JP 1996-536316	19960603
US 6140085	A	20001031	US 1997-973273	19971201

=> s dominant negative and (leafy or apetala or constans or floricaula or squamosa or flowering locus ca or fca)

L27 1 DOMINANT NEGATIVE AND (LEAFY OR APETALA OR CONSTANS OR FLORICAUL  
A OR SQUAMOSA OR FLOWERING LOCUS CA OR FCA)

=> d ti

L27 ANSWER 1 OF 1 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

TI Interaction of **LEAFY**, AGAMOUS and TERMINAL FLOWER1 in  
maintaining floral meristem identity in Arabidopsis.

=> d ab

L27 ANSWER 1 OF 1 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

AB The Arabidopsis transcription factor **LEAFY** acts upstream of homeotic genes such as AGAMOUS to confer floral identity on meristems that arise after the transition to reproductive development. Compared to the genetic circuitry regulating the establishment of floral meristem identity, little is known about its maintenance. Previous experiments with **leafy** heterozygous plants and agamous mutants grown in conditions that reduce the floral inductive stimulus have shown that both genes are required to prevent reversion of floral to inflorescence meristems. Here, we present evidence that **LEAFY** maintains floral meristem identity independently of AGAMOUS, and that the primary role of **LEAFY** is either direct repression of shoot identity genes or repression of an intermediate factor that activates shoot identity genes. The latter conclusions were deduced from the phenotypes conferred by a gain-of-function transgene, **LEAFY:VP16**, that appears to act as a **dominant negative**, or antimorphic, allele during maintenance of floral meristem identity. These observations contrast with previous findings that **LEAFY** acts as a direct activator of floral homeotic genes, supporting the hypothesis that the transcriptional activity of **LEAFY** is dependent on specific co-regulators.

=> d so

L27 ANSWER 1 OF 1 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

SO Development (Cambridge), (May; 2002) Vol. 129, No. 10, pp. 2519-2527.  
<http://dev.biologists.org/current.shtml>. print.  
ISSN: 0950-1991.

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